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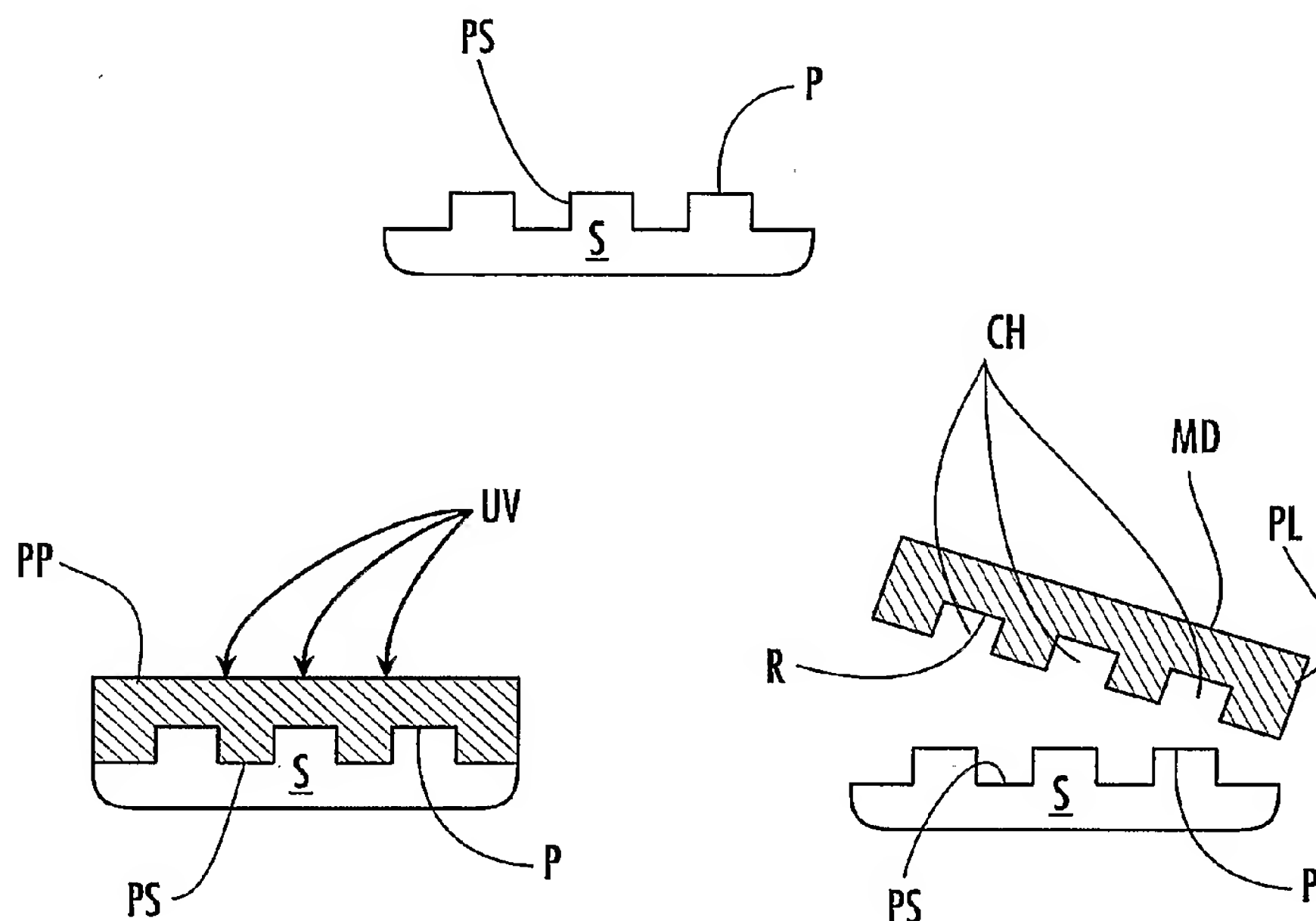
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[Continued on next page]

(54) Title: PHOTOCURABLE PERFLUOROPOLYETHERS FOR USE AS NOVEL MATERIALS IN MICROFLUIDIC DEVICES



(57) Abstract: A solvent-resistant microfluidic device (MD) is fabricated from a functionalized, photo-curable perfluoropolyether (PFPE). In one embodiment, a polymeric precursor (PP), comprising PFPE, is disposed on a patterned surface (PS) of a substrate (S), having raised protrusions (P). Ultraviolet light (UV) is applied to yield a patterned layer (PL) of photo-cured PFPE having recesses (R) comprising at least one channel (CH). Patterned layer (PL) is removed from patterned surface (PS) of substrate (S) to yield microfluidic device (MD).

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A. CLASSIFICATION OF SUBJECT MATTER

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USPC: 427/508;428/411.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : Please See Continuation Sheet

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,567,073 A (LARSON et al) 28 January 1986 (28.01.1986), entire document.	1-171
A	US 6,403,539 B1 (MARCHIONNI et al) 11 June 2002 (11.06.2002), entire document.	1-171

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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Continuation of B. FIELDS SEARCHED Item 1:

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